

## ABSTRACT OF DISCLOSURE

A power supply system, includes a power supplying unit supplying a DC power; a DC/DC converter having a plurality of phase processing units separating the DC power supplied from the power supplying unit into a plurality of phase currents to process the plurality of phase currents, with which the DC/DC converter converts the DC power into individual power supplies in a plurality of different voltages; and a controller sensing phase currents of the phase processing units and controlling the power supplying unit so as to interrupt a power supply from the power supplying unit where a voltage corresponding to any one of the phase currents is higher than a predetermined reference voltage.